

NOAA Fisheries' Proposed Strategy to Reduce Ship Strikes of North Atlantic Right Whales – Shipping Industry Dialog

Gregory Silber, Ph.D., Patricia Gerrior, and Barb Zoodsma National Marine Fisheries Service





Objectives for Today

• Discuss Strategy Objective: Reduce Threat of Ship Strikes of Right Whales while Minimizing Adverse Impacts on Ports and Shipping Industry

• We will briefly describe:

- The Bind: North Atlantic right whale lack of recovery
- our process, the considerations we made
- basic elements of the plan

Solicit your comment and input

We seek a dialog. What have we overlooked? Can the plan be improved while still providing maximum protection for the species and causing minimum economic impact?

The Depleted North Atlantic Right Whale – The Bind We Are In

- severely depleted by commercial whaling
- little or no recovery in the decades since protection from whaling pop'n may actually be declining (Caswell et al. 1999)
- Current official population estimate: ~300 individuals
- long-lived; slow reproducing few offspring: one calf/3-6 yrs
- reproduction erratic
- known death and injury from human activities -- likely seeing a minimum, likely many more go undetected
 - fishing activities
 - vessel traffic
 - accounts for more known right whale deaths than any other human activity
- loss of a even single individual impacts recovery

Statutory Responsibilities/Authorities

Endangered Species Act

- Prohibitions against "take"
- Recovery plans for listed species
- ESA section 7 consultations



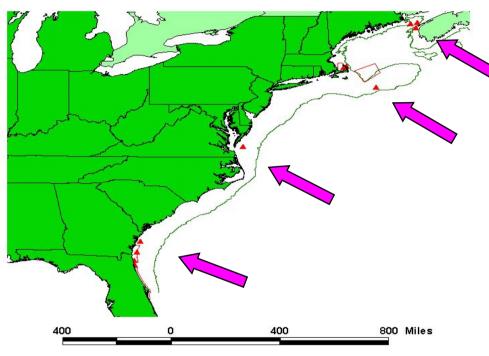
- → "take" = to harass, hunt, capture, or kill
- → NMFS Biol. Opin.: the death of a single right whale poses jeopardy to the continued existence of the species

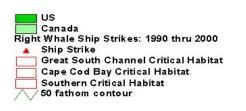
Marine Mammal Protection Act

- Prohibitions against "take"
- Limits how many individuals can be removed from a population
- \rightarrow therefore, no take is permitted under either the ESA or MMPA

Ship strikes occur along entire U.S. east coast

Ship Strikes During 1990-2000: North Atlantic Right Whales







Concerns of the U.S. Public

Congress

- Recognizes the problem of ship strikes
- Has provided annual increase in appropriations to reduce human impacts to right whale, major portion devoted to addressing ship strikes

Fishing Industry

- being regulated to reduce threat of fishing gear
- entanglement addressed via Atlantic Large Whale Take Reduction Plan (ALWTRP)
- views ship strikes as the big problem re: recovery

Environmental/Conservation Groups

- acutely aware of the problem
- possible lawsuits

Strategy Objective

A comprehensive, longterm, range-wide Strategy to reduce ship strikes of right whales while also minimizing adverse impacts to ports and shipping industry.





Developing NOAA's Strategy -- Approach Taken

- *Wide range* of options identified -- 100+ measures carefully considered -- from "do nothing" to "no ships"
- Used best available data: whales and ships
- Guiding Principles:
 - Limit potential economic impact as much as possible
 - Tightly bound in time and space
 - Port parity/equity
 - Predictability over unpredictability to facilitate voyage planning

Developing NOAA's Strategy

• Data Used:

- Vessel traffic information
- 30+ years of whale survey data
- Whale mortality data
- Tagging and modeling research
- Economic Studies
- 2001 report identifying management options
- Early feedback from other agencies
- Industry liaisons, biologists, key contacts
- Recovery Plan Implementation Teams

Elements of the Strategy

- 1. Continue ongoing ship strikes reduction measures
- 2. Implement education & outreach programs
- 3. Conservation Agreement with Canada
- 4. Federal agency consultations under Section 7 of the Endangered Species Act to address operations of sovereign immune vessels
- 5. New operational measures for all vessels 65' and greater such as routing measures and speed restrictions

Elements of the Strategy Technologies to Reduce Ship Strikes

- Moving Whales
 - alarm devices
- Moving Ships
 - passive acoustics (e.g., pop-up buoys)
 - active acoustics (e.g., SONAR)
 - predictive modeling
 - sonic tags
 - Other types (e.g., radar, infrared, synthetic aperture, satellite imagery)
 - Tagging

Nonetheless, a number of studies are being funded... See, also, "Technology" white paper...





Elements of the Strategy

- 5. Operational MeasuresAll vessels 65' and greater
- Routing measures
 - Minimizes confluence between whales and ships
- Speed restrictions
 - Considered *only* when no other measures possible
 - Exact speed to be determined: probably 10-14 knots
- Dynamically managed areas
 - All areas within U.S. Atlantic EEZ
 - Precautionary area established for limited time around

Strategy Overview—All Regions

- Objectives
 - --Minimize ship strike threat to right whales
 - --Minimize adverse impacts on ships and ports
- Defined tightly, temporally and spatially
- Based on all available data
- Based on input from shipping industry
- Applicable to vessels \geq 65 ft
- Sovereign immune vessels exempt to address operations of sovereign immune vessels

Current Implementation Actions

- ANPR comment period = 1 June 1- 15 Nov 2004
- Public and stakeholder meetings in summer/fall 2004; public comment/dialog
- Initiating NEPA process
- Partnering with USCG on Port Access Route Studies
- Fall/winter 2004/05: NMFS considers comments, modifies strategy
- Proposed Rule(s) public comment
- Final Rule

Whale Avoidance/Ship Strike Reduction Web Site

http:/www.nero.noaa.gov/shipstrike

http://www.nmfs.noaa.gov/prot_res/

